

ABSTRACT

An autonomous circuit, which may be embedded in a network product or standalone external to the network product, that routes the transmit and receive signals from the network node onto either a primary network cable or a secondary network cable. Determination of which cable to use for communication is made by monitoring activity on either the cable currently in use or on both cables at all times, and switching over to the alternate cable when a link failure condition is detected on the cable currently in use. The circuit provides automatic cable redundancy, with any interruption in communication being limited only to the time required to determine link failure and to switch over to the alternate cable path.